



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,763	08/15/2000	Atsushi Horike	1046.1218 (JDH)	4059
21171	7590	01/25/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			WALLACE, SCOTT A	
			ART UNIT	PAPER NUMBER
			2671	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/639,763	HORIIKE, ATSUSHI
	Examiner Scott Wallace	Art Unit 2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 December 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-6 and 9-15 is/are rejected.  
 7) Claim(s) 4,5,7,8 and 10 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**Art Unit: 2671**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Objections***

2. Claims 4,5 and 7 are objected to because of the following informalities: Parenthesis should only be around Fig #'s. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1, 2, 4-5, 9 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai, U.S. Patent No. 5,828,575.

5. As per claims 1, 2, 9, 11-13, Sakai discloses a solid editing method in a three-dimensional CAD system (column 3 lines 15-24 and column 5 lines 52-56), having a display screen (fig 1B, #44) and a operation unit for operating basic configurations displayed on said display screen (column 5 lines 5-8), for completing a final-dimensional configuration by an operation of combining a plurality of basic configurations (fig 29A and column 69 lines 1-11), said method comprising: displaying, on said display screen, in-the-making configurations from a first basic configuration as a start configuration down to the final three-dimensional configuration (fig 29A); selecting one of the in-the-making configurations displayed (fig 30); and setting as an edit target (column 71 lines 8-16; operator's modification to bend sequence) the

**Art Unit: 2671**

basic configuration finally combined with respect to the selected in-the-making configuration (column 71 lines 8-16).

6. As per claim 4, Sakai discloses a readable-by-computer medium recorded with a program for indicating a computer to edit a three-dimensional configuration formed by sequentially combining basic configurations, said program comprising: displaying, on said display screen, in-the-making configurations from a first basic configuration as a start configuration down to the final three-dimensional configuration (fig 29A); selecting a first of the in-the-making configurations displayed (fig 30); and setting as an edit target (column 71 lines 8-16; operator's modification to bend sequence) a basic configuration finally combined with respect to the first selected in-the-making configuration (column 71 lines 8-16), wherein said selecting further includes selecting a second in-the-making configuration (fig 30, the second in-the-making configuration will be the one the this one is dragged before or after), and the program further comprises changing a combination sequence of the basic configuration set as the edit target with the selection of the first in-the-making configuration, to just posterior or just anterior to the second in-the-making configuration (fig 30).

7. As per claim 5, Sakai discloses a readable-by-computer recording medium that provides instructions for completing a final three-dimensional configuration by an operation of combining a plurality of basic configurations, which, when executed by a computer, cause the computer to perform operations comprising: displaying, on a display screen, in-the-making configurations from a first basic configuration as a start configuration down to the final-dimensional configuration (fig 29A), wherein the three-dimensional configuration is stored in the form of element data representing the basic configurations (column 5 lines 1-65), and a sequence indicating data representing a combination sequence of plural items of element data (column 5 lines 45-60); selecting a first displayed in-the-making configuration (fig 30) and a second displayed in-the-making configuration (fig 30, the second in-the-making will be the one this is dragged before or after); setting as an edit target (column 71 lines 8-16; operator's modification to bend sequence) a basic configuration finally combined with respect to the selected first displayed in-the-making configuration (column 71 lines 8-16; and changing the combination sequence of the basic configuration set as the edit target with the selection of the first displayed in-the-making configuration (fig

**Art Unit: 2671**

30), to just posterior (or just anterior) to the second displayed in-the-making configuration (fig 30), and changing the sequence indicating data representing the combination sequence of plural items of element data (column 5 lines 45-60).

8. As per claim 9, Sakai discloses wherein said program further comprises changing the edit target configuration (column 5 lines 45-60).

9. As per claim 14, Sakai discloses receiving a designation of an edit method option from the user relating to the displayed sequence of the plurality of in-the-making CAD configurations (column 5 lines 45-60).

10. As per claim 15, Sakai discloses receiving a designation of an edit operation pursuant to the designated edit method from the user (column 5 lines 45-60); editing the designated three-dimensional CAD configuration via the displayed sequence of the plurality of in-the-making CAD configurations pursuant to the designated edit operation (column 5 lines 45-60); and displaying the edited three-dimensional CAD configuration (column 5 lines 45-60).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai in view of Shimizu et al., U.S. Patent No. 5,497,452.

13. As per claim 3, Sakai does not disclose wherein said program further comprises generating a sum of the basic configurations, a difference between the basic configurations, and a product of the basic

**Art Unit: 2671**

configurations. This is disclosed in Shimizu et al in column 1 lines 11-20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the added operations of Shimizu with the system of Sakai because to achieve the holes in the model as shown in fig 29A these types of operation would have been needed.

14. As per claim 6, Sakai does not disclose wherein said program further comprises deleting the edit target basic configuration from the combination of the basic configuration forming the final three-dimensional configuration. This is disclosed in Shimizu et al in column 5 lines 65-70 and column 6 line 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the added operations of Shimizu with the system of Sakai because this would make the editing part more flexible. If a part is deemed not to fit right then there would have to be a way to delete it.

***Allowable Subject Matter***

15. Claims 7-8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:****(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

**Art Unit: 2671**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Wallace whose telephone number is 703-605-5163. The examiner can normally be reached on Monday thru Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached on 703-305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MARK ZIMMERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600